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ABSTRACT

The new knowledge in outdoor education is synthesized in this monograph, and 8 principles felt essential to the successful program are enumerated. A historical section includes early terminology and objectives in the field, and discusses the first attempts at organizing the proponents of outdoor education. Administrative problems are examined in relation to personnel, facilities, and finance. The final section of the document is concerned with education for teachers in the field of outdoor education. The bibliography includes 20 dissertations and theses, mostly written during the 1960's, in its 35 entries. (ED)

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OUTDOOR EDUCATION: A SYNTHESIS

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An Overview

by

Julian W. Smith

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INTRODUCTION

Outdoor education is largely a "post-World War II" phenomenon in the United States. Although various students trace its beginning to earlier efforts—such as those at the Round Hill School, 1823, or the Gunnery School, 1861—it is impossible to document an organic connection between them and the present-day movement.

Outdoor education experienced a steady but slow growth from 1945 until enactment of the Elementary and Secondary Education Act in 1965. Both Titles I and III of that Act were utilized by educators to fund programs which might reasonably fall under the umbrella-topic, "outdoor education." Almost one hundred such new efforts were identified. Paralleling, and in part responsive to, this new surge of outdoor education activity have come new research and publications in the field. Master's and doctor's theses comprise, by all odds, the majority of research efforts in outdoor education. Their number shows an increase over the years, but there are still relatively few of them.

This monograph is an attempt to synthesize and conceptualize the best of the "new knowledge" in outdoor education. In the main, products of the decade of the 1960's form its basis.

PART I

PRINCIPLES OF OUTDOOR EDUCATION

Utilization of the outdoors and the materials found in the outdoors in education programs is not a new practice. Primitive man prepared his children to assume the responsibilities of adulthood and of his society primarily through direct experiences in the outdoors.

In modern times, however, schools have placed their major emphasis upon vicarious experiences for children. Teachers who regularly take their classes into an outdoor setting for learning experiences as an integral part of their curriculum are probably in the minority.

These facts are particularly interesting when seen in relationship to the movement of a large segment of our population from agrarian to urban settings. Whereas, in the past the majority of children were directly involved in meaningful agrarian activities contributing directly to the sustenance of the family unit, today most children are growing up in "asphalt jungles" of the city and suburbs, removed from the rural life and void of participation in meaningful work activities dealing directly with soil, plants, and animals.

This great social change, itself a response to a rapidly industrializing economy, has been identified in research as the foremost basis of the modern need for outdoor education. While no claims are made that outdoor education solves all the problems of rapid technological change, it is held that it meets some of the educational needs.

Outdoor education, an organized movement stressing the importance of outdoor activities as a practice in American schools, is less than thirty years old. Present-day concerns such as conservation, pollution, health, recreation, outdoor living skills, nature study, and natural science have been an important part of the outdoor education program from its beginnings.

Definitions of outdoor education are varied, ranging from simple statements such as "Outdoor Education is learning in the outdoors" to lengthy definitive interpretations. In relationship to public schools, a typical definition is "Outdoor Education is the utilization of the outdoors to facilitate and enrich learnings related to the school curriculum."

In the United States, outdoor education had its beginnings in the organized summer camping program. Early educators saw educational values and the achievement of school objectives in some of the experiences that children had in camping programs. Particularly impressive were social values and the peer-community living aspects. At this stage, outdoor education was thought of as a resident program emphasizing camping education.

Some of the early research dealt primarily with "Camping Education" and laid a basic philosophical groundwork for the present interpretation of outdoor education. In the early 1930's, L.B. Sharp said, "Outdoor education is a common sense method of learning. It is natural; it is plain, direct and simple. The principal thesis which underlies the implications of outdoor education for all subject matter, in all areas of study, and at all levels is: That which can best be learned inside the classroom should be learned there. That which can best be learned in the out-of-doors through direct experiences, dealing with native materials and life situations, should there be learned."

Studies of successful programs and research have identified certain principles which may be summarized as follows:

1. Outdoor education is a method or process utilizing the outdoors.
2. Outdoor education is not a separate discipline; it has no subject matter of its own.
3. Direct experiences in the outdoors are essential to the understanding of one's environment and, thus, to general education.
4. Useful outdoor experiences may be as brief as a few minutes or as long as several days or weeks.
5. A comprehensive outdoor education program provides direct experiences in the outdoors for all children at all grade levels.
6. Outdoor education involves the learner; emphasizes the exploratory approach; and utilizes multisensory experiences.
7. Outdoor experiences should be an integral part of modern education.
8. Outdoor education can be utilized to develop the understandings and skills necessary for the wise use of leisure time.

Despite thirty years of study and research, outdoor education is still in search of a definition which is satisfactory to all of its own supporters. There are clearly three, possibly more, clusters of outdoor educators who are in only marginal agreement. They are characterized as (1) environment-oriented, (2) conservation-oriented, and (3) outdoor activity-oriented.

PART II

HISTORY OF OUTDOOR EDUCATION

Outdoor education in the United States has been an active movement since the late 1940's. While operating under changing designations, there are clearly visible threads of continuity in it. Only within the last few years have historical studies been made which connect these threads. Other in-depth historical studies are needed.

It is clear that what is currently called outdoor education in this country owes its beginnings to the thrust of children's camping in the latter years of the nineteenth century. Organized children's camping was, during its earlier stages, primarily recreation-oriented. Its basic activities related to skills for outdoor living. However, it paralleled a strong movement in nature education taking place in the schools, and its activities reflected that movement. As organized camping matured, educators were attracted by the potential that camping experiences had for the total development of children.

It may be impossible to determine when the first American teacher went camping with his pupils; it doubtless happened early. But, in retrospect, it is clear that current American outdoor education programs owe their beginnings to two interestingly parallel movements:

1. Activities centering around the Life Camps-National Camp (New Jersey) programs of the late 1930's and early 1940's, and
2. Activities stemming from the Kellogg Foundation's three children's camps in Michigan over about the same time span.

Two men, L. B. Sharp in New Jersey and Julian W. Smith in Michigan, were key figures in a movement which seemed to burst onto the educational scene at the close of World War II. Actually, the war had simply postponed the plans of both men. Smith, operating largely within the public school establishment, and Sharp, generally outside it, played complementary roles. Both eventually joined university faculties; both achieved a national working base.

Within the United States, the 1950's saw outdoor education move out from New Jersey and Michigan to touch, in one fashion or another, practically every state. The same period also witnessed a considerable shift away from school camping as the sole activity. Increased emphasis was placed on the use of school sites, neighborhood parks,

and more remote sites. A corresponding shift took place in the commonly stated objectives of outdoor education. Earlier programs had justified their existence largely in terms of gains in the affective domain. The 1950's, possibly in response to Sputnik, witnessed an increased emphasis on the cognitive aspects of education. Much new terminology also came into being.

"Outdoor education" had already largely replaced "camping education" and "school camping." Then came "resident outdoor education," and "outdoor laboratory," "outdoor school," "school-in-the-woods," and even "outdoor education laboratory school." It is significant to note that the new terminology eliminates "camping" and most of it substitutes "school" for "camping."

The Outdoor Education Project of the American Association for Health, Physical Education and Recreation (National Education Association) was established in the 1950's. The project, financed largely by contributions from industry and directed by Julian W. Smith, sponsored or participated in almost two hundred state and regional workshops in the decade, in addition to numerous other activities. A major project emphasis has been on "skills for the outdoors," but this has not been an exclusive emphasis. A variety of new programs of several sorts trace their beginnings to project stimulation and assistance.

The 1960's were marked by a general increase in outdoor education activities. But history will doubtless see that particular decade as the beginning of United States government activity in the field. Numerous programs were funded under the Elementary and Secondary Education Act of 1965. Several federal agencies, especially those whose objectives lay in the area of conservation education, indicated awareness of the value of outdoor education in their own programs.

The Council on Outdoor Education and Camping of the American Association for Health, Physical Education and Recreation was founded in 1964. While its placement in a specialized organization of the National Education Association is questioned by many outdoor educators, it represents the first attempt to place outdoor education in a "mainstream" educational association. The council has launched an ambitious program of annual meetings, national conferences, and publications, as well as a number of study committees on problems of general concern.

In 1966 the *Journal of Outdoor Education*, the first national magazine in the field, published its pilot issue. Some 2,500 copies of each issue now share information with educators throughout the United States and in a dozen foreign countries. Presently, numerous newsletters of varying circulations also aid in sharing current information among outdoor educators.

PART III

OUTDOOR EDUCATIONAL EXPERIENCES

Relatively little research has been done on the educational content of *outdoor experiences*, especially when its bulk is contrasted with studies having to do primarily

with administrative concerns. However, some publications in the field do concentrate on content. Of ten textbooks published since 1960, seven are activity-oriented: five toward general outdoor education practices and two toward resident programs; one stresses both orientations.

In addition, a number of the programs funded under the Elementary and Secondary Education Act of 1965 have produced curriculum materials. In-service study groups composed of the teachers involved in the programs did the actual research and writing. On balance, it may fairly be said that there is currently a wealth of printed curriculum materials available to interested schools. It could not be said with equal assurance that most outdoor education materials have research validation.

Objectives

Stated educational objectives provide interesting indication of the transition of outdoor education from its "camping" phase to the more nearly academic orientation of today. Early claims as to the values of outdoor education experiences were clearly derived from the practices and the assumed values of private and agency camps for children. Indeed, the very language used reflects the "health and welfare" era of children's camping in the United States.

The oft-repeated early objectives of health-welfare camping—

1. Healthful living,
2. Working,
3. Social living,
4. Leisure pursuits—

became in the 1940's:

1. Learning to live together,
2. Learning to work,
3. Learning about the physical environment,
4. Learning to live healthfully.

By the early 1950's, such statements had been modified to read:

1. Social living,
2. Work experience,
3. Healthy living,
4. Outdoor education,
5. Supplement of classroom instruction.

In the 1960's, a student was much more likely to see outdoor education justified in terms of traditional subject matter. Two of the textbooks referred to above are organized (chaptered) in terms of academic disciplines.

Regardless of the emphasis at any given moment, outdoor education experiences usually have been selected in terms of what is known as the L. B. Sharp dictum, "Those things which can best be taught in the outdoors should be taught there."

The sciences, especially biology and ecology, have received an increasingly large share of the attention of outdoor educators in the last few years. Accounts of field work to nearby and remote sites for study and collecting are increasing. Innovative mobile equipment has been devised, especially in projects funded by Title III of the Elementary and Secondary Education Act.

Environmental education, a response to critical national problems, appears to be supplanting, at least in terminology, the old emphasis on conservation in outdoor education programs.

Evaluation

Empirical studies of the actual educational results of outdoor education experiences are not as abundant as one could wish. Several writers have called for such studies, even scolding the profession for not producing more. The studies which have been made are open to two major criticisms: (1) they are poorly designed and (2) the populations studied are too small for valid results. It is hoped that the next several years will produce more and better studies.

The more impressive of the few empirical studies have to do with the affective domain. Children show positive gains in personal-social characteristics following camp experiences. Improved relations with peers, improved race relations, and improved teacher-pupil relations are most pronounced among the noted gains. Some studies also suggest that a healthier self-concept may come from the same kind of experience.

Studies in the cognitive domain are fewer, less well-designed, and productive of fewer impressive findings. The findings generally indicate little or no difference in efficiency between traditional methods and outdoor education methods.

Several investigators did report subjectively observed differences in interest and attitude manifested by pupils in outdoor instruction. Studies which focus primarily upon interest and attitude are curiously missing.

Most research in outdoor education has concentrated on school camping. While the discreteness of this program recommends it to researchers, an obvious—and growing—need exists for studies of other aspects of outdoor education.

In addition to the reservations which have been expressed regarding the research methods used, more substantive questions have been raised relative to the dichotomy created when "indoor" and "outdoor" education are contrasted. It is entirely possible that outdoor educators will be called upon to devise unique instruments to evaluate unique processes.

PART IV

ADMINISTRATION

A pattern of education which takes learners out of their normal learning environment, the classroom, and puts them into a variety of outdoor environments, poses certain problems which appear unique—even exotic—to school administrators. It is not surprising that considerable attention has been paid to problems of organization, administration, facilities, transportation, and the like. A number of doctoral studies were devoted to planning for the organization, administration, and facilities for outdoor education programs for particular schools or school districts. Other studies designed general approaches which might be applied to any given situation. Particular attention has been paid to problems having to do with personnel and facilities.

Personnel

Certain principles of administration appear to have been solidified in practice and justified by research. In the area of personnel, it is now generally accepted that the qualifications for persons employed in outdoor education programs are not essentially different from those for equivalent persons in the schools. Most of the administrators of new programs funded under Titles I and III of the Elementary and Secondary Education Act, for instance, were already employed by the schools which the new programs were designed to serve.

In the early days of school camping, great emphasis was placed on securing staff members with considerable summer camp experience and with proportionately less experience in the classroom. It is safe to state that now the priorities have been reversed. Regularly certified teachers, at the appropriate level, are preferred by most school systems. This is not to say that certain special characteristics are not sought; "love of the outdoors," "background in ecology," and "knowledge of group processes" are frequently mentioned among the sought-for special qualities.

Salaries and conditions of employment are generally comparable, frequently identical, with in-school personnel. There appears also to be a growing tendency to equate the outdoor education administrator's salary and rank to that of a principal in the system. Likewise, teachers in outdoor programs are usually placed on the school's salary schedule just as if they had been given a regular classroom assignment. The question of extra pay for extra hours has appeared in some schools, but few firm solutions are apparent.

Interestingly, most of these professionals, once referred to as "counselors," now bear designations such as "trail-teacher," "outdoor-teacher," "camp-teacher" or "teacher-counselor." The title "counselor" in school camps is generally now reserved for certain non-certified personnel such as might be called teacher-aides in the in-school situation.

Certain specializations of personnel have appeared in outdoor education. In the school camping period of outdoor education, every staff member was a generalist. Some of the California school camps began to break away from this practice in the 1950's, when they employed "counselors" for cabin and other routine duties, and "trail-teachers" for actual outdoor instruction. While current practices are by no means consistent, such specialization of function now appears in a number of situations. In some instances, subject matter specialists are appearing in outdoor education. Titles such as "ecology counselor" and "geology counselor," while not common, do exist.

Facilities

Securing facilities for the conduct of outdoor education programs has been a preoccupying problem for many researchers, as well as for many school administrators. As long as it was assumed that schools must actually own, and completely control, the land and improvements thereon, the problem constituted the largest single hurdle to initiating programs. Experience and research have indicated that much of the early frustration over facilities was needless. Literally hundreds of school districts are presently carrying on part-time, or year-round, outdoor education programs while only a small minority actually own outdoor facilities.

School administrators have located children's camps as well as other kinds of outdoor "teaching stations" in proximity to their schools. More importantly, they have found the owners willing and eager to share. Both research and experience lend credence to the statement that schools do not need actually to buy extensive outdoor holdings in order to carry on a variety of outdoor education activities.

Owners of children's camps have made their facilities readily available to schools, to their mutual benefit. At least two states, Michigan and Wisconsin, have established a policy of building camps suitable for year-round use on state property. While an ideal school camp might have certain characteristics not possessed by the typical summer camp, practice and research suggest that the problems are not of such magnitude as to be prohibitive.

The major limitation appears to be that most children's camps are summer camps and require extensive "winterization." Even so, larger cities such as New York and Chicago have identified sufficient nearby facilities to carry on substantial school camping programs.

Facilities for non-resident programs appear to be as readily available to schools as do children's camps. Parks, forest preserves, nature centers, museums, state and federal agencies, and even private conservation clubs have proved willing, even eager, to share their lands. In a number of instances the owners have been willing to make suitable modifications and additions to their facilities to accommodate school programs. In some instances, joint programs between owner and user have been devised, sharing facilities and personnel.

While a rapid growth of outdoor education in the future might well cause a facility crisis, no such crisis is apparent at present. Schools over most of the country can find serviceable, if not ideal, facilities for the conduct of a variety of outdoor education experiences.

Finance

Financing outdoor education has proved an even more troublesome problem than the persistent problem of financing education, generally. In the 1940's and 1950's outdoor education was primarily school camping, and school camping was usually practiced in relatively affluent school districts. Except for small experimental ventures, no programs touched the inner-city schools. Few programs arose in the less wealthy states.

While the literature shows constant reference to the principle that outdoor education should be financed just as are other aspects of a modern school program, it was—in fact—frequently financed quite differently. Many programs began on the assumption that children or parents would pay a fee equal to the total cost of the experience, including transportation and instruction as well as housing and food (if required). It proved difficult to move from such a basis to public support. The net effect today is that outdoor education is often conceived of even in some schools whose programs are twenty or more years old, as an "extra." Such is not universal practice but research has not indicated its extent.

There is general agreement among scholars who have addressed themselves to the problem that the cost of food should be borne by the parent or, in the case of indigent or needy children, by a charitable agency. There appears to be some question among authorities as to who should pay for housing. All agree that costs of instruction should be paid by the school districts.

Another difficult problem of finance arises when a private or semi-public agency provides a *program* (as opposed to furnishing only facilities). In a number of cases, nature centers, museums, and similar agencies devise and conduct educational experiences for the schools on a per-person fee basis. Both legal and professional questions arise out of the practice.

PART V

' OUTDOOR TEACHER EDUCATION

The key to the success of any outdoor education program lies in the hands of the classroom teacher. If the teacher sees values in the outdoor experiences and is enthusiastic about working with his class in an outdoor setting, he will find the means for doing so. On the other hand, the teacher who looks negatively on outdoor experiences will find many reasons for keeping his class indoors. Thus, the attitudes and

competencies of the teacher are of vital importance to the outdoor education movement.

Outdoor Experiences

Research has identified the kinds of outdoor-related experiences that teachers have had which they feel are helpful in the planning and conduct of outdoor instructional activities. Most of the teachers who include such activities in the curriculum have themselves participated in camping and have outdoor-related hobbies and interests. The teachers indicate, however, that most of these experiences were not included in university preparation programs at either the undergraduate or graduate level. The experiences were, rather, a part of the teachers' personal lives and were most helpful if related in nature and content to classroom curriculum.

Factors Which Influence Teachers

The predominant factor discouraging teachers from utilizing the outdoors is a feeling of not being prepared adequately for this type of teaching. Many teachers feel that they do not have enough factual knowledge about the materials and processes found in the outdoors. Other teachers do not believe that they have the necessary skills to work with students in the informal setting of the outdoors and fear that they will not be able to maintain the necessary discipline.

School administrators can do much to encourage their teachers to use the outdoors for instructional activities. Administrators need to convince teachers that the administration sees the value of outdoor education and that it desires to have teachers participate in outdoor programs. Further, administrators can:

1. Conduct an in-service education program emphasizing the values of outdoor activities and their validity as part of the school curriculum;
2. Provide the teachers with adequate help in planning and conducting outdoor activities;
3. Provide teachers with the necessary equipment and teaching aids;
4. Reduce the class to manageable size;
5. Provide the teachers with lists of suggested usable sites and provide the necessary transportation;
6. Provide the teachers with information concerning available resource people.

The teachers most likely to participate in outdoor education programs are those who have a personal interest in the outdoors, who are interested in trying new things, and who participate in outdoor-related leisure-time activities.

Teacher Education

Satisfactory results of previous outdoor instructional activities do more to encourage teachers to include outdoor instruction as a regular part of class work than any other influencing factor. This indicates the need for teacher education institutions to include outdoor activities as a regular part of professional preparation.

Teacher education programs should attempt to provide for students:

1. An understanding of the values of outdoor education;
2. An understanding of the relationship of outdoor education to the school curriculum;
3. Skills in planning for outdoor experiences and in working with children in the outdoors;
4. An appreciation of the values of living in a peer community, having daily living tasks and work experiences;
5. The concept that the teacher should be concerned with development of the total child.

For teachers already in service, the same may be provided by institutes and workshops as well as by course offerings. Increasingly, colleges and universities are involving themselves in the continued education of teachers in their service areas.

Current Efforts

Although relatively few teacher education institutions have moved into the field of outdoor education, certain interesting programs have come into being. Diversity seems to be the watchword. College and university programs may offer "a major in," "an emphasis in," "a concentration in," or "electives in" outdoor education. Departmental placement of courses is as variable as the degrees offered.

Two patterns of internal organization for outdoor teacher education have emerged. Some institutions have chosen the special department route, but they are a distinct minority. Most have chosen an inter-disciplinary approach. In neither case has there been empirical research to justify the choice.

Teacher education for the outdoors is in its beginning stages. If one may extrapolate the 1960's into the 1970's, the next decade should witness great growth.

BIBLIOGRAPHY

- Ambry, Edward Joseph. "An Investigation of the Administrative Problems Related to Resident Outdoor Education Programs." Doctoral Dissertation, Southern Illinois University, Carbondale, Ill., 1964.
- Beker, Jerome. "The Relationship Between School Camping Social Climate and Change in Children's Self-Concepts and Patterns of Social Relationship." Doctoral Dissertation, Teachers College, Columbia University, New York, N.Y., 1959.
- Bennett, Bruce L. "Camping and Outdoor Education Began at Round Hill School," *Journal of Outdoor Education*, 3:14-17, Fall 1968.
- Committee on Graduate Programs. Report delivered to Council on Outdoor Education and Camping, April 14, 1969, Boston, Mass.
- Committee on Outdoor Education for Inner-City Schools. Report delivered to Council on Outdoor Education and Camping, April 14, 1969, Boston, Mass.
- Crompton, John L. "Review of the Research Literature in Outdoor Education Which Relates to the Affective Domain, the Cognitive Domain, and Those Administrative Factors Which Relate Directly to the Impact of the Educational Experience on Children." Unpublished paper, University of Illinois, Urbana, Ill., 1968.
- Cross, Carole B. "A Study of the Development of Clear Lake Camp." Master's Thesis, Northern Illinois University, DeKalb, Ill., 1967.
- Cyphers, Vincent A. "A Study to Determine the Significant Outdoor Experiences for Elementary Teachers." Doctoral Dissertation, Colorado State College, Greeley, Colo., 1961.
- Davidson, Morris. "Changes in Self-Concepts and Sociometric Status of Fifth and Sixth Grade Children As a Result of Two Different School Camp Curricula." Doctoral Dissertation, University of California, Berkeley, Calif., 1965.
- Donaldson, George W. "How Schools Secure Camps," *Journal of Outdoor Education*, 1:9-15, Fall 1966.
- Donaldson, George W. "Profile of the 'New' Director of Outdoor/Conservation Education," Northern Illinois University, Oregon, Ill., 1969.
- Ezersky, Eugene M. *City to Country*. New York: Educational Facilities Laboratory, Inc., 1969.
- Fitzpatrick, Clinton N. "Philosophy and Goals for Outdoor Education." Doctoral Dissertation, Colorado State College, Greeley, Colo., 1968.
- Grilley, Helen E. "Development of an Instrument for Evaluating Resident Outdoor Education Laboratory School Programs." Doctoral Dissertation, Colorado State College, Greeley, Colo., 1966.
- Hammerman, Donald R. "A Historical Analysis of the Socio-Cultural Factors That Influenced the Development of Camping Education." Doctoral Dissertation, Pennsylvania State University, University Park, Penn., 1961.

- Hammerman, Donald R., and William M. Hammerman. *Teaching in the Outdoors*. Minneapolis: Burgess Publishing Company, 1964.
- Homan, Paul Barringer. "Educational Specifications for the Outdoor School." Doctoral Dissertation, University of Denver, Denver, Colo., 1965.
- Horn, B. Ray. "A Factor Analysis of Attitudes Toward the Term 'Outdoor Education'," *Journal of Outdoor Education*, 4:15-17, Fall 1969.
- Hug, John W. "Analysis of the Factors Which Influence Elementary Teachers in the Utilization of Outdoor Instructional Activities." Doctoral Dissertation, Indiana University, Bloomington, Ind., 1964.
- Hug, John W., and Phyllis J. Wilson. *Curriculum Enrichment Outdoors*. New York: Harper and Row, 1965.
- Kranzer, Herman C. "Effects of School Camping on Selected Aspects of Pupil Behavior--An Experimental Study." Doctoral Dissertation, University of California at Los Angeles, Los Angeles, Calif., 1958.
- Lewis, Charles A., Jr. "Factors Influencing the Development of Outdoor Education." Doctoral Dissertation, New York University, New York, N.Y., 1968.
- National Audubon Society. *Directory of Environmental Education Facilities*. New York, N.Y.: The Society, 1969.
- New Jersey State Council for Environmental Education. *Evaluation for Environmental Education*. Mountain Lakes, N.J.: The Council, 1969.
- Pulliam, Mabel Gertrude. "An Analysis of Selected Outdoor Education Programs and Recommendations for Curriculum." Doctoral Dissertation, Colorado State College, Greeley, Colo., 1963.
- Rhead, Raymond E. "A Proposed Interdisciplinary Approach to an Outdoor Education Program in the Professional Teacher Preparation Curriculum at Weber State College." Doctoral Dissertation, University of Utah, Salt Lake City, Utah, 1967.
- Rillo, Thomas J. "A Preliminary Definition of the Role of the Outdoor Education Coordinator in Representative Public School Outdoor Education Programs." Doctoral Dissertation, Southern Illinois University, Carbondale, Ill., 1964.
- Rogers, Martin H. "Principles and Functions of Outdoor Education." Doctoral Dissertation, Syracuse University, Syracuse, N.Y., 1955.
- Schafer, Frank D. "An Administrative Guide for Initiating Resident Outdoor Education in the Public Schools." Doctoral Dissertation, Teachers College, Columbia University, New York, N.Y., 1965.
- Smith, Julian W. *et al. Outdoor Education*. Englewood Cliffs: Prentice-Hall, 1963.
- Smith, Julian W., and Morris Wiener. "Outdoor Education," *Encyclopedia of Educational Research*. New York: The Macmillan Company, 1969, pp. 921-23.

Stack, Genevieve C. "An Evaluation of Attitudinal Outcomes of Fifth and Sixth Grade Students Following a Period of School Camping." Doctoral Dissertation, University of Oklahoma, Norman, Okla., 1960.

Stapp, William B. "Developing a Conservation Education Program for the Ann Arbor Public School System, and Integrating It into the Existing Curriculum." Doctoral Dissertation, University of Michigan, Ann Arbor, Mich., 1963.

Wiener, Morris. "Developing a Rationale for Outdoor Education." Doctoral Dissertation, Michigan State University, East Lansing, Mich., 1965.

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